

Title (en)

LIQUID DISCHARGE APPARATUS, INK JET RECORDING METHOD, AND PIGMENT TEXTILE PRINTING INK COMPOSITION

Title (de)

FLÜSSIGKEITSAUSSTOSSVORRICHTUNG, TINTENSTRAHLAUFZEICHNUNGSVERFAHREN UND  
PIGMENTTEXTILDRUCKTINTENZUSAMMENSETZUNG

Title (fr)

APPAREIL DE DÉCHARGE DE LIQUIDE, PROCÉDÉ D'ENREGISTREMENT À JET D'ENCRE ET COMPOSITION D'ENCRE DE PIGMENT  
D'IMPRESSION SUR TEXTILE

Publication

**EP 3674479 A1 20200701 (EN)**

Application

**EP 19219605 A 20191224**

Priority

JP 2018244251 A 20181227

Abstract (en)

A liquid discharge apparatus of the present disclosure includes an ink composition and a liquid discharge section including a nozzle for discharging the ink composition. The ink composition is a pigment textile printing ink composition containing resin particles, water, and an organic solvent. The resin particles have a glass transition temperature of 5°C or less and are contained in an amount of 6.5 mass% or more based on the total amount of the ink composition. The ink composition contains a polyhydric alcohol having a boiling point of 270°C or more as the organic solvent in an amount of 15.0 mass% or less based on the total amount of the ink composition. The liquid discharge section includes a pressure chamber and a circulation passage for circulating the ink composition in the pressure chamber.

IPC 8 full level

**D06P 1/44** (2006.01); **B41J 2/14** (2006.01); **D06P 1/52** (2006.01); **D06P 1/54** (2006.01); **D06P 1/651** (2006.01); **D06P 5/30** (2006.01)

CPC (source: CN EP US)

**B41J 2/01** (2013.01 - CN US); **B41J 2/14233** (2013.01 - EP); **B41J 3/4078** (2013.01 - US); **B41M 5/0023** (2013.01 - CN US);  
**B41M 5/0047** (2013.01 - CN); **C09D 11/102** (2013.01 - US); **C09D 11/107** (2013.01 - US); **C09D 11/30** (2013.01 - CN);  
**C09D 11/322** (2013.01 - US); **D06P 1/44** (2013.01 - CN EP); **D06P 1/5271** (2013.01 - CN EP); **D06P 1/5285** (2013.01 - EP);  
**D06P 1/54** (2013.01 - EP); **D06P 1/65118** (2013.01 - EP); **D06P 5/30** (2013.01 - CN EP); **B41J 2002/14411** (2013.01 - EP);  
**B41J 2002/14419** (2013.01 - EP); **B41J 2002/14491** (2013.01 - EP); **B41J 2202/11** (2013.01 - EP); **B41J 2202/12** (2013.01 - EP)

Citation (applicant)

- JP 2018244251 A 20181227
- JP 2009030014 A 20090212 - RISO KAGAKU CORP

Citation (search report)

- [XY] US 2014210901 A1 20140731 - OHASHI MASAKAZU [JP], et al
- [XY] US 2016311233 A1 20161027 - MURAI MASAYUKI [JP], et al
- [Y] EP 3351389 A1 20180725 - KONICA MINOLTA INC [JP]
- [X] DATABASE WPI Week 201678, Derwent World Patents Index; AN 2016-698790, XP002799088

Cited by

US11618255B2; EP3970976A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3674479 A1 20200701**; CN 111379173 A 20200707; JP 2020104362 A 20200709; JP 7218571 B2 20230207; US 11130359 B2 20210928;  
US 2020207136 A1 20200702

DOCDB simple family (application)

**EP 19219605 A 20191224**; CN 201911357697 A 20191225; JP 2018244251 A 20181227; US 201916727095 A 20191226